

IDEM Office of Air Management Rules Guidance

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DEVELOPMENT OF NEW RULES CONCERNING THE INCORPORATION OF NATIONAL EMISSION STANDARDS FOR HAZARDOUS AIR POLLUTANTS FOR SYNTHETIC ORGANIC CHEMICAL MANUFACTURING INDUSTRIES AND CERTAIN OTHER PROCESSES # 98-14(APCB)

FACT SHEET

Overview

This rulemaking adds two new rules, 326 IAC 20-11 and 20-12, to incorporate the national emission standard for hazardous air pollutants (NESHAPs) for synthetic organic chemical manufacturing industries (SOCMI) and certain other non-SOCMI processes subject to the negotiated rulemaking for equipment leaks. The rulemaking is known as the Hazardous Organic NESHAP, or HON.

Citations Affected

Adds 326 IAC 20-11 and 20-12.

Affected Persons

Synthetic organic chemical manufacturers and other processes.

Potential Cost

Low because the rulemaking incorporates federal requirements.

Description

Under Title III of the Clean Air Act Amendments of 1990, the U.S. EPA is required to regulate emissions of 188 listed hazardous air pollutants (HAPs) (Note: the original list contained 189 HAPs, but the U.S. EPA has subsequently removed caprolactum from the list). For categories of major sources listed pursuant to Section 112(c), the Clean Air Act requires the U.S. EPA to develop standards that will require the application of stringent air pollution controls, known as maximum achievable control technology (MACT). MACT reflects the maximum degree of reduction in emissions of HAPs that is achievable taking into consideration the cost of achieving the emission reduction, any health and environmental impacts, and energy requirements. The published list of source categories includes synthetic organic chemical manufacturing industries and other processes, such as pharmaceutical manufacturing processes and polymers and resins production processes.

On April 22, 1994, the U.S. EPA promulgated the HON which established national emission standards for process vents, storage vessels, wastewater, transfer operations, and equipment leaks at SOCMI sources, and for equipment leaks for certain other processes at non-SOCMI sources. The standards are codified at 40 CFR 63 in Subparts F, G, H and I. The following generally defines the content of each subpart:

<u>Subpart F</u>: Applicability (for SOCMI only); <u>Subpart G</u>: Standards for SOCMI emission points (process vents, storage vessels, wastewater, and transfer operations);

<u>Subpart H</u>: Standards for Equipment Leaks for SOCMI and non-SOCMI sources (Negotiated Rule); and

<u>Subpart I</u>: Applicability for non-SOCMI Process Subject to Subpart H.

The HON regulates approximately 112 different HAPs used in chemical manufacturing processes at SOCMI sources. Certain SOCMI emission points are required to meet an established level of control referred to as the Reference Control Technology.

The equipment leak detection and repair program requirements are a combination of work practice and equipment requirements. Both SOCMI and non-SOCMI processes are subject to the equipment leak requirements. The non-SOCMI processes include:
Styrene/butadiene rubber production;
Polybutadiene rubber production;
Certain pesticide production processes;
Certain polymers and resins processes;
Pharmaceutical production; and
Miscellaneous butadiene uses.

The HON is expected to significantly reduce emissions of HAP and volatile organic compounds at affected sources. A slight increase in nitrogen oxide and carbon monoxide may result from the operation of combustion control equipment.

There are three (3) SOCMI sources, and two (2) Non-SOCMI sources located in Indiana that are affected by these rules. The sources are: G.E. Plastics, Reilly Industries, Amoco Chemical, and two Eli Lilly facilities.

The primary compliance date for process vents, storage vessels, transfer operations, and wastewater was April 22, 1997. The compliance date for certain wastewater streams, heat exchange systems, and associated equipment has been delayed in the most recent amendment to the rule (62 FR 2722). The compliance dates for SOCMI and non-SOCMI sources subject to the equipment leak requirements are dependent on the group assigned to the process, with the last grouping having a compliance date of October 23, 1995. The equipment leak compliance dates for certain units meeting specific criteria have

also been delayed, however all units subject to the LDAR requirements must also be in compliance by April 22, 1997.

Consistency with Federal Requirements

The new rules are consistent with federal rules.

CONSIDERATION OF FACTORS OUTLINED IN INDIANA CODE 13-14-8-4

Indiana Code 13-14-8-4 requires that in adopting rules and establishing standards, the board shall take into account:

- 1) all existing physical conditions and the character of the area affected;
- 2) past, present, and probably future uses of the area, including the character of the uses of surrounding areas
- 3) zoning classifications;
- 4) the nature of the existing air quality or existing water quality as the case may be;
- 5) technical feasibility, including the quality conditions that could reasonably be achieved through coordinated control of all factors affecting the quality; and
- 6) economic reasonableness of measuring or reducing any particular type of pollution.

The board shall also take into account the right of all persons to an environment sufficiently uncontaminated as not to be injurious to human, plant, animal, or aquatic life or to the reasonable enjoyment of life and property.

IDEM Contact

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